UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/933,819	08/22/2001	Shoichi Kamano	032865-012	7236

		EXAMINER
7590	04/20/2005	MEONSKE, TONIA L

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ART UNIT	PAPER NUMBER
2183	

DATE MAILED: 04/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/933,819	KAMANO ET AL.
	Examiner	Art Unit	
	Tonia L Meonske	2183	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>26 January 2005</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1,4-6,8 and 11</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1,4-6,8 and 11</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>18 October 2004</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

    1.☒ Certified copies of the priority documents have been received.

    2.☐ Certified copies of the priority documents have been received in Application No. _____ .

    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>10/18/04</u>.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____ .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2.   Claims 1, 4-6, 8 and 11 are rejected under 35 U.S.C. 102(b) as being clearly anticipated

by Beacom et al., US Patent 5,093,908 (herein after referred to as "Beacom").

3.   Referring to claim 1, Beacom has taught a data processing system comprising:

a.   at least one special purpose data processing unit for executing a series of

predetermined data processes by a special purpose instruction (Figure 1, elements 120

and 130); and

b.   a general purpose data processing unit for executing processes designated by

general purpose instructions (Figure 1, element 110);

c.   wherein the at least one special purpose data processing unit includes: a dedicated

circuit portion specialized in specific data processes (Figure 1, elements 120 and 130,

column 2, lines 60-column 3, line 22, The dedicated circuit of elements 120 and 130

processes floating point instructions.) and a sequence control portion that supplies first

control signals for controlling the dedicated circuit portion in accordance with a

predetermined processing procedure (Figure 3, element 301); and

d.   a selector for selectively supplying the dedicated circuit portion with selected

control signals between the first control signals supplied from the sequence control

portion and second control signals supplied from the general purpose data processing unit

(Figure 3 element 302 selects a signal value and latches the value. This signal value is

subsequently supplied to element 130, which is a part of the dedicated circuit portion.),

the second control signals superseding the first control signals (Figure 3, element 111,

When an exception occurs as indicated by signal 111, or the second control signals, then

a hold is latched into the hold logic 302, regardless of the input values from the

sequencer, element 310, or second input control values. Therefore the second input

control values supersede the first input control values.) and the general purpose data

processing unit being able to control the dedicated circuit portion instead of the sequence

control portion (Figure 1, element 111, Figure 3, elements 111, 360, 302, 303, and 112,

column 8, line 62-column 9, line 37. Element 111 from the general purpose data

processing unit controls the dedicated circuit by indicating an exception condition, and in

response to this exception condition, a hold signal is generated and a hold value latched

into element 302.).

4.   Referring to claim 4, Beacom has taught a data processing system according to claim 1, as

described above, and further comprising:

a.   a fetch unit for fetching the special purpose instruction and the general purpose

instructions from a recording means where a program having the special purpose

instruction and the general purpose instructions are recorded and for supplying the special

purpose data processing unit with the special purpose instruction (column 8, lines 60-62,

column 3, line 47-column 4, line 36).

5.   Referring to claim 5, Beacom has taught a data processing system according to claim 4,

as described above,

        a.   wherein the general purpose data processing unit is able to supply the second

        control signals based on at least one of the general purpose instructions (Figure 3,

        element 111, column 6, lines 9-65).

6.   Referring to claim 6, Beacom has taught a data processing system according to claim 1,

as described above, and wherein the selection means is controlled by the general purpose data

processing unit (Figure 3, element 360 is controlled by element 111, which is from the general

purpose data processing unit.).

7.   Referring to claim 8, Beacom has taught a control method of a data processing system

comprising at least one special data processing unit for executing a series of predetermined data

processes by a special purpose instruction (Figure 1, elements 120 and 130, column 2, lines 60-

column 3, line 22, The dedicated circuit of elements 120 and 130 processes floating point

instructions.) and a general purpose data processing unit for executing processes designated by

general purpose instructions (Figure 1, element 110), wherein the at least one special purpose

data processing unit includes: a dedicated circuit portion specialized in specific data processes

(Figure 1, elements 120 and 130, column 2, line 60-column 3, line 22, The dedicated circuit

processes floating point instructions.); a sequence control portion that supplies first control

signals for controlling the dedicated circuit portion in accordance with a predetermined

processing procedure (Figure 3, element 301); and a selector for supplying the dedicated circuit

portion with selected control signals between the first control signals supplied from the sequence

control portion and second control signals supplied from the general purpose data processing unit

(Figure 3 element 302 selects a signal value and latches the value. This signal value is

subsequently supplied to element 130, which is a part of the dedicated circuit portion.),

comprising:

     a.   a first step of controlling the dedicated circuit portion with a series of the first

control signals based on the special purpose instruction (column 9, lines 18-23) and

     b.   a second step of controlling the dedicated circuit portion with the second control

signals based on at least one of the general purpose instructions (Figure 1, element 111,

Figure 3, elements 111, 360, 302, 303, and 112, column 8, line 62-column 9, line 37.

Element 111 from the general purpose data processing unit controls the dedicated circuit

by indicating an exception condition, and in response to this exception condition, a hold

signal is generated, latched into element 302 and sent to element 130.), the second control

signals superseding the first control signals (Figure 3, element 111, When an exception

occurs as indicated by signal 111, or the second control signals, then a hold is latched into

the hold logic 302, regardless of the input values from the sequencer, element 310, or

second input control values. Therefore the second input control values supersede the first

input control values.) and the general purpose data processing unit controlling the

dedicated circuit portion instead of the sequence portion (Figure 1, element 111, Figure 3,

elements 111, 360, 302, 303, and 112, column 8, line 62-column 9, line 37. Element 111

from the general purpose data processing unit controls the dedicated circuit by indicating

an exception condition, and in response to this exception condition, a hold signal is

generated and a hold value latched into element 302.).

8.   Referring to claim 11, Beacom has taught a program product within a readable medium

executed on a data processing system for controlling the data processing system, the program

product has general purpose instructions for a general purpose data processing unit (Figure 1,

element 110, column 2, lines 61-67) and a special purpose instruction for a special purpose data

processing unit, the special purpose data processing unit comprising: a dedicated circuit portion

specialized in specific data processes (Figure 1, elements 120 and 130, column 2, lines 61-67); a

sequence control portion that supplies first control signal for controlling the dedicated circuit

portion in accordance with a predetermined processing procedure (Figure 3, element 301); and a

selector means for supplying the dedicated circuit portion with selected control signals between

the first control signals supplied from the sequence control portion and second control signals

supplied form the general purpose data processing unit (Figure 3 element 302 selects a signal

value and latches the value. This signal value is subsequently supplied to element 130, which is

a part of the dedicated circuit portion.),

        a.   wherein the special purpose instruction is an instruction to supply the dedicated

        circuit portion with the first control signals (Figure 3, elements 133, 301, and 305), and

        b.   wherein the general-purpose instructions includes a priority instruction that is

        converted into the second control signals (Figure 3, element 111) that supersede the first

        control signals (Figure 3, element 111, When an exception occurs as indicated by signal

        111, or the second control signals, then a hold is latched into the hold logic 302,

        regardless of the input values from the sequencer, element 310, or second input control

        values. Therefore the second input control values supersede the first input control

        values.) and control the dedicated circuit portion instead of the sequence control portion

(Figure 1, element 111, Figure 3, elements 111, 360, 302, 303, and 112, column 8, line 62-column 9, line 37. Element 111 from the general purpose data processing unit controls the dedicated circuit by indicating an exception condition, and in response to this exception condition, a hold signal is generated and latched into element 302.).

Response to Arguments

9.   Applicant's arguments with respect to claims 1,4-6,8 and 11 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

11.   A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tonia L Meonske whose telephone number is (571) 272-4170. The examiner can normally be reached on Monday-Friday, 8-4:30.

13.   If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Eddie P Chan can be reached on (571) 272-4162. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

14.   Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tlm

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